

**Regional Water Technology Innovation Cluster Anniversary Event**  
**January 18, 2012**  
**U.S. EPA - Cincinnati, Ohio**

Last year, on January 18, 2011, Lisa P. Jackson, Administrator for the U.S. Environmental Protection Agency (EPA), and Karen Mills, Administrator for the U.S. Small Business Administration (SBA), launched the regional Water Technology Innovation Cluster (WTIC) in Southwestern Ohio, Northern Kentucky, and Southeastern Indiana. Over the past year, EPA, the WTIC, and others have formed collaborations and built on regional capabilities, resources, and successes with the goal of helping meet the demand for water technologies that address today's environmental challenges.

On January 18, 2012, EPA's Office of Research and Development (ORD) hosted an event to mark the one-year anniversary of the WTIC launch and to highlight these regional efforts to advance water technology research, development, and implementation. Over 140 participants attended representing different technology sectors and interests: EPA, state and regional government agencies, universities, industry (Proctor & Gamble, GE), small businesses and technology companies, regional economic development organizations, water utilities, other Federal agencies (Air Force Research Laboratory, SBA), consulting and engineering firms, green partnership organizations, and others.

Lek Kadeli, Deputy Assistant Administrator for EPA ORD, provided a keynote address and talked about accomplishments and milestones of the past year, including: collaborative events such as a Small Business Innovation Research (SBIR) proposal preparation and resources workshop, the *Water Challenges Workshop: Meeting the Demands for Innovative Solutions*, the *Water and Energy Nexus Technology Innovation Forum*, and others; a \$1.5 million commitment under EPA's SBIR Program to support new technology development by the private sector; the upcoming STAR Request for Applications for a National Center for Innovative Treatment Technology in Small Drinking Water Systems; and in-process cooperative research agreements between researchers at EPA Cincinnati and water technology companies in the region.

Alan Vicory, Chair of the WTIC Board of Directors, gave a progress report on the WTIC and discussed challenges, future opportunities, and new directions in 2012. He highlighted recent accomplishments, including: restructuring of the WTIC Board and formation of new work groups to advance water technology development and commercialization, adoption of performance metrics as WTIC goals, new relationships with technology development firms such as Qualcomm and Atlantium, a newly redesign web site and branding strategy in progress, agreements in place for test bed sites, and planning for the *WTIC-Dayton Water Conference* in 2012. Bonnie Deer from the Cincinnati Branch of SBA discussed their role as a small business resource, which includes cluster development and support.

During a panel session, representatives from local technology companies shared their experiences in building regional water technology partnerships:

- Dr. Nina Joshi, President and CEO of UES, Inc.—a science and technology company based in Dayton, OH—spoke about the benefits UES has seen in participating in the WTIC. WTIC has introduced the company to a number of key members in the public sector, allowing them to better understand the regulatory aspects of water quality technologies, as well as the market sectors open to technology transition. This knowledge will facilitate efficient and effective technology transition, producing jobs and an economic benefit to the region.
- Dr. Oliver Lawal, President of Aquionics, Inc., a leading supplier of ultraviolet disinfection technology in the U.S., reported that the company has been based in Northern Kentucky for

almost 30 years, but has had only sporadic relationships with local companies, academics, utilities, and regulators. They have fostered relationships further afield in the U.S. and internationally, but feel they have missed opportunities to build growth locally. WTIC has enabled them to connect with local talent, which they hope will lead to accelerated development and growth. The success of the WTIC is very much related to contributing members and their commitment to choose a local option. Aquionics has made that commitment already and is hopeful that they can further exploit these opportunities.

- According to Jason Barkeloo, President of Pilus Energy, a start-up company from Cincinnati, OH, when engaging in international discussions, being affiliated with the WTIC is a validator—other countries would love to be involved with such a group. This provides Pilus with a competitive advantage. EPA's Test and Evaluation facility, located in Cincinnati, provides an incubator and facility around which they can create economic value and career growth and conduct research and development.
- Andrew Ziegler, President of Waterline Technology of Mansfield, OH, stated that the WTIC introduced the company to the capabilities of EPA ORD. EPA is engaging in collaborative efforts with Waterline to test and analyze the capabilities of a new Multi-Barrier Microbiological Purifier Technology to provide clean and safe drinking water. As a result of attending one of the first cluster meetings, Waterline is in process of formalizing a Cooperative Research and Development Agreement (CRADA) for the testing and evaluation of their new Multi Barrier Drinking Water Disinfection skid-mounted system to be used for public and private water supplies. According to Waterline, the WTIC efforts have helped streamline the process required to further the commercialization of this new innovative technology.

Two principal investigators from EPA Cincinnati discussed ongoing innovative water technology research and opportunities for collaboration, specifically through EPA Pathfinder Innovation Projects. These projects were awarded funding in 2011 under an internal competition among agency scientists for innovative research and creative solutions to advance science and sustainability at EPA. Dr. Jorge Santo-Domingo presented, "The Drinking Water Microbiome: Integrating Metagenomics and Transcriptomics as a Novel Pilot Approach to Assess Health Risks and Ecosystem Management." Dr. E. Sahle-Demessie presented, "Innovative Approach to the Biological Treatment of Hydrophobic Chlorinated Pollutants in Water and Gas Streams under Anoxic and Anaerobic Conditions."

The event concluded with a signing ceremony by Lek Kadeli of EPA ORD and Dr. David Dominic of Wright State University (WSU) for a Memorandum of Understanding (MOU) to increase the relevance of WSU's research programs in drinking water through new and innovative activities in infrastructure piping, pumping, and transport and sustainable water monitoring and treatment technology development. This MOU helps advance collaboration on water-related research and practical solutions to environmental issues.

Additional information on the WTIC Anniversary Event is available at <http://www.epa.gov/nrmrl/watercluster/>.